

STATEMENT OF CONSIDERATIONS

CLASS ADVANCE WAIVER OF THE GOVERNMENT'S DOMESTIC AND FOREIGN PATENT AND COPYRIGHT RIGHTS UNDER DOMESTIC FIRST AND SECOND TIER SUBCONTRACTS ISSUED BY LLNL/LANL/SNL FOR THE ACCELERATED STRATEGIC COMPUTING INITIATIVE, THE PATHFORWARD PROJECT; DOE WAIVER NO. W(C)-97-004; SAN 675

Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL) and Sandia National Laboratories (SNL) (jointly referred to as the Laboratories) are working on the Accelerated Strategic Computing Initiative (ASCI) to develop supercomputers for DOE program needs. To meet the requirements of DOE'S Stockpile Stewardship and Management Program, DOE is enhancing its computational power by developing supercomputers with the capability of performing tera-scale computing. The ultimate goal is to have supercomputers capable of performing three-dimensional modeling and nuclear weapons relevant simulations. With these new capabilities, scientists can analyze the effects of stockpile aging and anticipate future problems with existing nuclear warheads and their components.

The ASCI Program is developing several generations of computers. In 1995, INTEL was selected for the ASCI Option Red System, and demonstrated one trillion operations per second computational speed. In 1996, IBM was selected by DOE for the ASCI Blue Pacific Project. This \$93 million contract was awarded to build a supercomputer (IBM RS/6000 SP) system consisting of clusters of shared-memory processors. The initial components were delivered to LLNL in September 1996 and operate at 136 gigaflops. These will be upgraded to a production model, a 3 teraFLOP/s system, in December 1998. In parallel, Cray Research, a subsidiary of Silicon Graphics, Inc., will provide a 3 teraFLOP/s system to LANL over a comparable time period.

The Pathforward Phase of the ASCI Project

The ASCI Pathforward Project is aimed at developing the technology necessary to enable 30 TeraFLOP/s computer systems by 2001 and 100 TeraFLOP/s by 2004. A Request for Expressed Interest (REI) was published in the Commerce Business Daily to determine what companies would bid on the Pathforward Project. On July 16, 1997, the Laboratories issued to 21 interested companies a Request for Proposal (RFP No. PF-01) to develop the key (critical path) interconnect technologies necessary to accelerate the development of balanced 30 to 100 TeraFLOP/s computer systems. More specifically, the RFP sought the participation by the domestic commercial computer industry to accelerate development of key

STATEMENT OF CONSIDERATIONS
CLASS ADVANCE WAIVER
ASCI RFP No. PF-01

high performance computing technologies that would subsequently be economically sustained in the marketplace. The technologies to be developed are expected to be part of a company's current business plan, but would not otherwise be available in the time frame needed or at the scale/performance level required by ASCI Program. More than the company's technology, it is the acceleration of the development and expansion of capability that is being required. In order to avoid directing industry on how to build computer systems or design interconnect fabric, DOE has defined the interconnect performance requirements to support the Stockpile Stewardship and Management Program. The RFP outlined DOE's interest in developing a low-latency, high-bandwidth interconnect and I/O technology that provides for scaling commodity-based shared memory computer units.

After receiving and reviewing several proposals, the Laboratories selected the proposals that best meet the ASCI goals and have begun negotiating first tier subcontracts with the respective companies. The projected total budget for these first tier subcontracts is approximately \$55 million over the next four years. In order to stay within the fiscal constraints of the program, the Laboratories expect each selected subcontractor to contribute at least a 20% share of the total cost of the contract. Before concluding the negotiations on these first tier subcontracts, this Class Advance Waiver should be executed in order to provide the appropriate provisions to be included in the first tier subcontracts. This Class Advance Waiver will also apply to domestic second tier subcontractors when the first tier subcontract qualifies for this Class Advance Waiver.

The Allocation of Patent Rights

A small business or non-profit organization will retain the patent rights to their subject inventions under the Bayh-Dole Act. See 35 USC 200-212. If a non-Bayh-Dole subcontractor under the subject RFP does not agree to cost-share at least 20% of the total contract cost, that subcontractor will receive the standard DEAR patent and FAR data clauses in connection with the R&D procurement. However, such a subcontractor can still petition the government for either a separate Advance Waiver of its own or an Identified Invention Waiver to obtain title to specific subject inventions.

In the ASCI Blue Pacific Project, the DOE issued a memorandum regarding intellectual property rights for the ASCI Blue procurement. See Appendix A. The provisions in this Appendix A were used as the basis for the provisions being used

**STATEMENT OF CONSIDERATIONS
CLASS ADVANCE WAIVER
ASCI RFP No. PF-01**

to negotiate the first tier subcontracts for the ASCI Pathforward Project. See Appendix B. If a non-Bayh-Dole subcontractor is willing to cost-share by an amount of at least 20% of the total contract cost, the DOE agrees to waive, in advance, patent rights to the for-profit subcontractor in the subcontractor's subject inventions. See Appendix B, sections I and II. The patent rights waiver is subject to the retained government-use license, march-in rights, reporting requirements, DOE approval of assignments, 35 U.S.C. 204, and a U.S. Competitiveness provision. See Appendix B, sections I and II.

The Allocation of Rights in Computer Software

The Bayh-Dole Act only applies to the allocation of patent rights. Therefore, a subcontractor (small business, non-profit or for-profit organization) may assert copyright in computer software without the Contracting Officer's prior approval only if DOE has specifically granted this right. Under the subject RFP, when a subcontractor is willing to cost-share by an amount of at least 20% of the total contract cost, the DOE agrees, in advance, to authorize the subcontractor to assert copyright without the Contracting Officer's prior approval in software produced under the subcontract by their employees. See Appendix B, sections I and III. The right to assert copyright in software is subject to a limited government-use license for a period of five years to allow the subcontractor sufficient time to commercialize the computer software. In the limited government-use license, the subcontractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government. However, the limited government-use license in copyrighted software will revert to a broad Government license, which allows the Government to distribute copies to the public, if DOE march-in rights are exercised, for example, where the subcontractor has not taken effective steps to commercialize the software. See Appendix B, section III, (c)(1), third paragraph.

It is not expected that any software or hardware will be delivered to the Laboratories under the subject RFP. The expected deliverables will be: (1) the demonstration of the Interconnect technology performance to prove functionality of key hardware and software components as well as overall integration of the approach; (2) a document or a demonstrated methodology to scale to 30-100 TeraFLOP/s systems; and (3) detailed reports of technical activities, performance results, and lessons learned associated with the endeavor. Thus, the limited

**STATEMENT OF CONSIDERATIONS
CLASS ADVANCE WAIVER
ASCI RFP No. PF-01**

amount of software developed under the subcontracts to accommodate changes in hardware components such as switch and adapter designs is not a deliverable item that would be delivered to DOE's Energy Science and Technology Software Center (ESTSC). The developed computer software will be modifications of the subcontractors' software used for operating interconnect capabilities. Thus, the software would have very specific applicability to the functioning and scaling of specific hardware systems and would be practically useless to DOE without the specific hardware equipment and the underlying proprietary software of the subcontractors. In fact, DOE Program intends to purchase the commercial products that should be developed by the subcontractors after the research and development of the present subcontracts is concluded. However, if there is deliverable software developed and delivered to the Laboratories, DOE expects the Laboratories to comply with their contract obligations of providing this delivered software to DOE's ESTSC. DOE believes granting the copyright in software is warranted here in order to stimulate developed end products to purchase in the future.

Conclusion

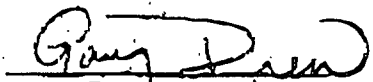
The Initially selected domestic subcontractors are U.S. companies, representing a combination of small and large entities, with extensive backgrounds in the supercomputer technologies. There was adequate notice of the issuance of the subject RFP in the Commerce Business Daily. In addition, the Laboratories have made other contacts during the ASCI Program. Technical experts from each Laboratory reviewed all of the proposals and based their initial selection of proposals on technical capability of the companies, cost sharing and adequacy of deliverables.

This Class Advance Waiver and the terms of the intellectual property clauses included within the subject subcontracts are meant to cover the scope of the work under the particular RFP No. PF-01 of the Pathforward Project and shall not serve as precedent for any follow-on work to be negotiated separately with the subcontractors in the future. Also, this Class Advance Waiver shall apply to second tier subcontracts that a first tier subcontractor issues. However, this Class Advance Waiver will not apply to foreign owned or controlled companies. DOE Patent Counsel will qualify each subcontractor by written certification that this Class Advance Waiver is applicable to their subcontract. Such certification will include verification of the minimum percentage cost share by the subcontractor, a determination that the subcontractor is a U.S. company, and verification of the acceptability of the terms and conditions of the subcontract. If any company does

STATEMENT OF CONSIDERATIONS
CLASS ADVANCE WAIVER
ASCI RFP No. PF-01

not qualify for this Class Advance Waiver or is not satisfied with the terms and conditions of the subcontract necessary to qualify for this Waiver, then that company may separately petition DOE for their own Advance Waiver.

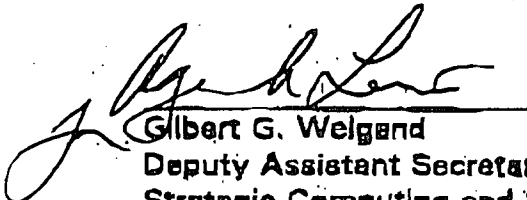
For the foregoing reasons, and in view of the objectives and considerations set forth in 10 CFR 784 and DOE Acquisition Letter 87-5, all of which have been considered, it is recommended that the requested waiver be granted for domestic first tier and second tier subcontracts, which meet the above requirements, executed under the RFP No. PF-01.


Gary Draw
Counsel for Intellectual Property
DOE, Oakland Operations Office, CA

Date: 11/6/97

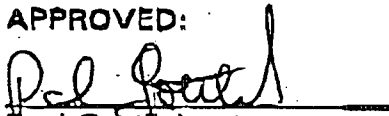
Based on the foregoing Statement of Considerations, it is determined that the interests of the United States and the general public will best be served by waiver of the United States' domestic and foreign patent rights and copyright in software copyright as set forth herein, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the subcontracts where, through such modification or extension, the purpose, scope or DOE cost of the subcontracts has been substantially altered. This waiver shall not affect any waiver previously granted.

CONCURRENCE:


Gilbert G. Welgand
Deputy Assistant Secretary for
Strategic Computing and Simulation (DP-50)

Date: 11/6/97

APPROVED:


Paul Gottlieb
Assistant General Counsel
for Technology Transfer and Intellectual Property

Date: 11/2/97

APPENDIX A
ASCI BLUE INTELLECTUAL PROPERTY

ASCI BLUE INTELLECTUAL PROPERTY

The following is the text of Department of Energy Memorandum regarding Intellectual Property Rights for the ASCI Blue Procurement:

If the respondent to the RFP does not agree to cost-share at least 20% of the total contract cost, that respondent if successful would get the standard patent and data clauses in connection with such a procurement. On the other hand, if the respondent is willing to cost-share by an amount of at least 20% excluding waived fee, the DOE will agree to waive, in advance, patent rights to the respondent in its inventions and authorize the respondent to assert copyright in software produced under the contract subject to the following requirement:

1. With respect to Patent Rights, a standard DOE Patent Rights Clause including the waiver will contain the following provisions:

- A. Any waived rights to inventions will be subject to a reserved government use license as follows: "The government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world."
- B. The government will have march-in rights to any subject inventions consistent with the march-in rights set out in 35 U.S.C. 203 and 48 C.F.R. 27.304-1(g).
- C. That the recipient of such rights agree to submit, upon the request of DOE, a non-proprietary report no more frequently than annually on efforts to utilize any technology arising under the contract.
- D. Any assignment of invention rights is subject to DOE approval.
- E. That the recipient agree to the following United States Competitiveness provision:

U.S. Competitiveness Provision

"The waiver recipient agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the waiver recipient can show to the satisfaction of DOE that it is not commercially feasible to do so. Processes, services, and improvements thereof which are covered by any waived invention developed under this contract shall be incorporated into the contractor's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States. The waiver recipient further agrees to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees."

- F. U.S. Preference per 35 USC 204 will apply.

2. With respect to copyrights of computer software, the standard DOE rights in Technical Data Article as set out in Acquisition Letter 87-5 would be modified as follows: Paragraph (c)(1) would be replaced with the following:

- (1) Data first produced in the performance of this contract. Unless provided otherwise in paragraph (d) of this clause, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. The prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U. S. Copyright Office. For data other than computer software the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

The Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in computer software first produced in the performance of this contract. For computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government. Contractor will provide the DOE an abstract suitable for publication, describing the function of the software for which copyright is asserted.

This limited Government license will revert to a broad Government license (where the Government has the right to distribute the software to the public and permit others to do so) after five (5) years if the Contractor has not taken effective steps to commercialize the software; or where it is necessary to alleviate health, safety or energy needs that are not reasonably satisfied by the Contractor, or to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the Contractor.

Paragraph (d)(3) would be modified by eliminating the first two sentences and retaining the last sentence as follows:

The Contractor shall promptly deliver to the Contracting Officer or to the Patent Counsel designated by the Contracting Officer a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled and other terms pertaining to the computer software to which claim to copyright is made.

APPENDIX B
ASCI PATHFORWARD CONTRACT CLAUSES
WHEN CLASS ADVANCE WAIVER APPLIES

P.2 011

**SUBCONTRACT LANGUAGE FOR ASCI PATHFORWARD PROJECT
WHEN THE DOE ADVANCE WAIVER IS APPLICABLE**

The following language will be used when the first tier subcontractor is a domestic company and the subcontractor is providing at least 20% of the total project cost.

- I. The following intellectual property clauses will apply to this contract with the modifications outlined in sections II and III below.
- | | |
|-----------------|--|
| FAR 52.227-1 | AUTHORIZATION AND CONSENT (JUL 1995), with Alternate I |
| FAR 52.227-14 | RIGHTS IN DATA-GENERAL (JUN 1987) and ALTERNATIVES II, III & V, if any "data" is produced, acquired, or furnished with items, components, or processes delivered for use. |
| FAR 52.227-16 | ADDITIONAL DATA REQUIREMENTS (JUN 1987) |
| DEAR 952.227-11 | PATENT RIGHTS - RETENTION BY THE CONTRACTOR (SHORT FORM) (FEB 1995), if the Subcontractor is a Domestic Small Business or Non-Profit Organization, as defined by FAR 27.301. |
| DEAR 952.227-13 | PATENT RIGHTS - ACQUISITION BY THE GOVERNMENT (FEB 1995), if the Subcontractor is not a Domestic Small Business or Non-Profit Organization, as defined by FAR 27.301. |
- II. Except for any second tier subcontracts with foreign owned or controlled companies, the DEAR 952.227-13 clause of the GENERAL PROVISIONS is replaced with 10 CFR 784.12 DOE Patent Rights-Waiver (JUL 1995). In addition, the below provision shall be applicable to this (first tier) Subcontract and second tier subcontracts.

U.S. Competitiveness

The waiver recipient agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the waiver recipient can show to the satisfaction of DOE that it is not commercially feasible to do so. Processes, services, and improvements thereof which are covered by any waived invention developed under this contract shall be incorporated into the contractor's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States, and shall not result in reduction of the use of the same processes, services, or improvements in the United States. The waiver recipient further agrees to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees.

- III. Paragraphs (c)(1) Copyright, and (d)(3) Release Publication and Use of Data, of FAR Clause 52.227-14, Rights in Data-General (JUN 1987) shall be substituted with the following:

(c) Copyright.

(1) ~~Data first produced in the performance of this contract.~~ Unless provided otherwise in paragraph (d) of this clause, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. Except for computer software and scientific and technical articles, the prior, express written permission of the Contracting Officer is required to establish claim to copyright subsisting in all other data first produced in the performance of this contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U. S. Copyright Office. Per data other than computer software the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and

display publicly, by or on behalf of the Government.

The Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in computer software first produced in the performance of this contract. For a period of 5 years beginning on the date the Contractor asserts copyright in computer software, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government. Contractor will provide the DOE an abstract suitable for publication, describing the function of the software for which copyright is asserted.

After the five (5) year period set forth above, or if, prior to the end of such period, the Contractor has not taken effective steps to commercialize the software, or where it is necessary to alleviate health, safety or energy needs that are not reasonably satisfied by the Contractor, or to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the Contractor, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

(d) Release, publication and use of data.

(3) The Contractor agrees to comply with the appropriate terms to assure the dissemination of the computer software as specified by the Contracting Officer. The Contractor shall also promptly deliver to the Contracting Officer or to the Patent Counsel designated by the Contracting Officer a duly executed and approved license instrument fully confirmatory of all rights to which the Government is entitled and other terms pertaining to the computer software to which claim to copyright is made.

United States Government

Department of Energy

memorandum

DATE: December 6, 2001

REPLY TO

ATTN OF: Gary Drew
Oakland Operations Office
Intellectual Property Law Division

SUBJECT: Extend Class Advance Waiver to New ASCI Pathforward Subcontracts

TO: William H. Reed
Director, Office of Advanced Simulation
And Computing (NA-114)

Paul Gottlieb
Assistant General Counsel for
Technology Transfer and Intellectual Property

Issue

Approval of extending the existing Class Advance Waiver to additional subcontracts to be issued under the ASCI Pathforward program.

Background

To meet the requirements of NNSA's Stockpile Stewardship Program, NNSA is enhancing its computational power by developing supercomputers with the capability of performing tera-scale computing. The ASCI Pathforward effort, which is an element of the Advanced Simulation and Computing (ASC – formerly known as ASCI) program, is aimed at developing advanced computing technologies necessary to enable the building of a 100 TeraFLOPs supercomputer by FY06. The Lawrence Livermore National Laboratory (LLNL) has issued several subcontracts to U.S. companies to develop these key technologies, which are part of a company's current business plan but would not otherwise be available in the time frame needed or at the scale/performance level required by the ASC Program.

The Class Waiver

In 1997, a Class Advance Waiver (W(C)-97-004) was granted to subcontractors that cost-shared at least 20% of the total contract cost. For non-Bayh-Dole organizations such as a for-profit entity, this waiver allowed the subcontractor to elect their inventions. Please note

that Bayh-Dole legislation already allows small businesses and non-profit organizations to elect their inventions under FAR 52.227-11. Therefore, the portion of the Waiver relating to the election of inventions does not apply to these entities.

The Waiver also granted to subcontractors the right to establish, without prior approval of the Contracting Officer, a claim to copyright subsisting in computer software first produced in the performance of this subcontract. When a subcontractor asserts copyright in software, the subcontractor grants to the Government a limited government use license for a period of five years. This reverts to a broad government use license (the right to distribute copies to the public) after five years, or earlier, if the subcontractor fails to commercialize the technology. All subcontractors (small business, non-profit and for-profit entities) need to meet the 20% cost share requirement in order to qualify for the copyright provisions of the Waiver.

This Waiver applied to the subcontracts issued under RFP No. PF-01.

The Memorandum

In addition to the Waiver, a December 2, 1997 memorandum was approved by HQ-Program and HQ-legal. The memorandum was created to provide IBM and the other subcontractors with the right to establish, without prior approval of the Contracting Officer, claim to copyright subsisting in all other data, i.e., any data first produced in the performance of the subcontract that is neither computer software nor published data. This data is referred to as non-published data. An example of non-published data would be schematics, which a subcontractor would want to copyright when the commercial products are available. The Government retains a broad license in the data, but the Government agrees to delay the release of this type of data to the public for five years. However, the Government would release the non-published data under several conditions prescribed under paragraph (d)(4). For example, the Government could release the information under a FOIA request or to support ASCI Program objectives. See Appendix A. ASCI Program supported IBM's position that the release of this technical data should be delayed in order to allow the company the opportunity for a competitive advantage to commercialize this technology. The FAR based subcontracts were amended as shown in the attached Appendix A.

In addition, IBM requested a modification to the U.S. Competitiveness provision, which was approved by ASCI Program. That modification to the U.S. Competitiveness provision will not be extended for any subcontract under these three RFPs. However, any subcontractor may request a modification to the U.S. Competitiveness, which will be considered by NNSA Program.

Discussion

In this next phase of ASCI Pathforward, LLNL is in the process of issuing several new RFPs. These projects are the Scalable Global Secure (SGS) File System (RFP-B514193), Optical

Switch (RFP-B512016) and Scalable Rendering (RFP-B512013). All three projects are directly and intimately related to the interconnect fabric and input/output technology. In general, file systems are required to feed (input) massive amounts of data into compute platforms consisting of thousand of nodes, each node containing multiple processors. Optical switches are required to route the computed data sets out of the compute platforms and to multiple, varied viewing platforms (interconnect). Scalable rendering is necessary to take the computed data sets (output) from the compute platforms and render it into viewable, usable, multi-faceted theatres where users can see and interact with the results of the computations.

These three projects are directly related to the interconnect fabric and input/output technology discussed in the original Waiver. Therefore, the reasons for granting the Waiver still apply to these new subcontracts. LLNL has selected several subcontractors and has begun contract negotiations. Each of these subcontracts exceeds the minimum 20% cost-share necessary to qualify for the Waiver. Each of these subcontractors is a U.S. company with extensive background in the supercomputer technologies.

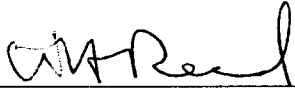
It is expected that some of the subcontractors may also request the right to establish, without prior approval of the Contracting Officer, claim to copyright subsisting in non-published data as defined in Appendix A. See Appendix A, paragraph (c)(1), third subparagraph. In addition, these subcontractors may request the Government to delay the release to the public of non-published data for five years. However, section (d)(4) does allow the Government to release the non-published data for certain specified reasons such as FOIA, support of ASC program objectives, and Government obligations under international agreements. See Appendix A, paragraph (d)(4).


If this extension of the Waiver and the attached Appendix A provisions are granted, the same conditions in the original Waiver will apply to the subcontracts issued under the three new RFPs. Each subcontractor will need to cost-share at least 20% of the total cost of the subcontract. The Waiver will not apply to foreign owned or controlled companies. Each subcontractor will need to comply with a U.S. competitiveness provision or seek NNSA program approval for an alternate benefit to the U.S. economy. The rights under the Waiver shall apply to second-tier subcontracts that a first-tier subcontractor issues.

In addition, DOE Patent Counsel will qualify each subcontractor by written certification that this Class Advance Waiver is applicable to their subcontract. Such certification will include verification of the minimum percentage cost share by the subcontractor, a determination that the subcontractor is a U.S. company, and verification of the acceptability of the terms and conditions of the subcontract. If any company does not qualify for this Class Advance Waiver or is not satisfied with the terms and conditions of the subcontract necessary to qualify for this Waiver, then that company may separately petition DOE for their own Advance Waiver.

Recommendation

That the Class Advance Waiver (W(C)-97-004) be extended and the attached Appendix A provisions be approved such that subcontracts issued under the ASC Pathforward program relating to the SGS File System (RFP-B514193), Optical Switch (RFP-B512016) and Scalable Rendering (RFP-B512013) efforts may contain these provisions.

Concurrence:  Date: Dec 7, 2001
William H. Reed
Director, Office of Advanced Simulation
And Computing (NA-114)

Approved:  Date: 12-10-01
Paul Gottlieb
Assistant General Counsel for
Technology Transfer and Intellectual Property

APPENDIX A

Modifications to the Rights-In-Data Clause

In FAR 52.227-14 Rights-In-Data—General clause, paragraphs (c) and (d) are replaced with the following:

(c) Copyright.

- (1) Data first produced in the performance of this contract. Unless provided otherwise in paragraph (d) of this clause, the Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in scientific and technical articles based on or containing data (published data) first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings or similar works. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such published data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U. S. Copyright Office. For the published data, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted published data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.

The Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in computer software first produced in the performance of this contract. For computer software, the Contractor grants to the Government and others acting in its behalf for a period of five (5) years from the date of production, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government. The Contractor will provide the DOE an abstract suitable for publication, describing the function of the software for which copyright is asserted.

The Contractor may establish, without prior approval of the Contracting Officer, claim to copyright subsisting in all other data (non-published data). Non-published data is data first produced in the performance of this contract that is neither computer software nor published data. For such non-published data, the Contractor grants to the Government and others acting in its behalf, a paid-up nonexclusive, irrevocable worldwide license in such copyrighted non-published data to reproduce, distribute copies to the public, prepare derivative works, and perform publicly and display publicly by or on behalf of the Government.

After the time period set forth above for computer software, or if, prior to the end of such periods, the contractor has not taken effective steps to commercialize the software, or where it is necessary to alleviate health, safety or energy needs that are not reasonably satisfied by the Contractor, or to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the Contractor, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted software to reproduce, distribute copies to the public, prepare derivative works, perform publicly and display publicly, and to permit others to do so.

- (2) Data not first produced in the performance of this contract. The Contractor shall not, without prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contains the copyright notice of 17 U.S.C. 401 or 402, unless the Contractor identifies such data and

grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause; provided, however, that if such data are computer software, the Government shall acquire a copyright license as set forth in subparagraph (g)(3) of this clause if included in this contract or as otherwise may be provided in a collateral agreement incorporated in or made part of this contract.

- (3) Removal of copyright notices. The Government agrees not to remove any copyright notices placed on data pursuant to this paragraph (c), and to include such notices on all reproductions of the data.
- (d) Release, publication and use of data.
 - (1) The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except to the extent such data may be subject to the Federal export control or national security laws or regulations, or unless otherwise provided in this paragraph of this clause or expressly set forth in this contract.
 - (2) The Contractor agrees that to the extent it receives or is given access to data necessary for the performance of this contract which contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless otherwise specifically authorized in writing by the Contracting Officer.
 - (3) The Contractor shall promptly deliver to the Contracting Officer or to the DOE Patent Counsel designated by the Contracting Officer a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled, and other terms pertaining to the computer software to which claim to copyright is made.
 - (4) For data other than computer software, provided that such data (1) are not generally known or available from other sources without obligation concerning its confidentiality, (2) have not been made available by the owner to others without obligation concerning its confidentiality, and (3) are not otherwise already available to the Government without obligation concerning its confidentiality, the Government will have the right to provide to others technical data delivered to the DOE Defense Program Labs or DOE in performance of this contract after five years from the date such data is first produced, except that in the interim disclosure or use may be made solely for the following purposes:
 - (i) As required for evaluation by Pathforward Program personnel at DOE and DOE Defense Program Labs;
 - (ii) As required to support the Accelerated Strategic Computing (ASC) Program objectives;
 - (iii) As required to respond to a request under the Freedom of Information Act (5 U.S.C. 552), and other applicable laws or regulations, if any;
 - (iv) As required to meet the Government's obligations under international agreements and treaties;
 - (v) As required to commercialize the data if the Contractor has not taken effective steps to

do so;

- (vi) As required to alleviate health, safety or energy needs that are not reasonably satisfied by the Contractor; and
- (vii) As required to meet requirements for public use specified by Federal Regulations and these requirements are not reasonably satisfied by the Contractor.